

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

As a preliminary matter, Applicant notes the Office Action's approval of the drawings and consideration of the Information Disclosure Statement, both filed on March 12, 2004.

The specification and claims 1 and 3 stand objected to for minor informalities. Claims 1-3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,157,743 to Goris et al. (hereinafter "Goris") in combination with U.S. Patent No. 6,298,404 to Mishra. Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Goris and Mishra in further view of Mishra<sup>1</sup>. Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Goris and Mishra in further view of U.S. Patent No. 5,329,616 to Silverbrook.

By this amendment, the title has been amended according to the Examiner's helpful suggestion found on page 2 of the Office Action. Applicant respectfully submits that the title, as amended, is clearly indicative to the invention to which the claims are directed. Withdrawal of the objection to the title is respectfully requested. Claims 1, 3 and 4 have been amended for clarity and claim 1 has been amended to address the concerns raised by the Examiner on page 2 of the Office Action as discussed in greater detail below. New claims 6-9 have been added to the application and claims 2 and 5 remain unchanged.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. After amending the claims as set forth above, claims 1-9 are now pending in this application for consideration.

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<sup>1</sup> Applicant is confused by this rejection of the combination of Goris and Mishra in further view of Mishra. If the combination of Goris and Mishra fail to disclose a claimed feature, Applicant is puzzled how the same Mishra reference discloses this feature. (See, paragraph 8, pages 7 and 8 of the Office Action). Clarification of this point in the next communication is respectfully requested.

Applicant respectfully submits that each of the independent claims is patentably distinguishable over the cited references as required by § 103. Applicant further submits that none of the cited references, whether considered alone or in combination, discloses Applicant's claimed image processing apparatus including *a block-data-length conversion section which adds respective bits of different data lengths to variable-length codes of blocks read from the variable-length-code storage, converting data lengths of the blocks into a shorter constant data length than the constant data length, if the determination section determines that the respective bits are added to all blocks, the different data lengths being obtained by subtracting a shortest data length from a data length of each block stored in the bit-length storage* as recited by independent claim 1. New independent claim 6 recites a similar patentable feature in the context of a method claim. By contrast, the cited references fail to disclose, teach or suggest this claimed feature. Accordingly, independent claims 1 and 6 and claims dependent therefrom are patentably distinguishable over the cited references. This distinction will be further described below.

#### **THE CLAIMS ARE IN PROPER FORM**

Claim 1 stands objected to for the use of the word "bit" as meaning a small piece or quantity of anything. Applicant has amended claim 1 to remove the word "bit" and now claim 1 specifically recites that each block is adjusted to a constant data length *by adding to or truncating part of a variable-length code of each block* and a bit-length storage stores *a data length of the bits* added by the adjusting section. Support for the amendment to claim 1 can at least be found on page 7, lines 16-23 of the present specification. Applicant respectfully submits that claim 1, as amended, is clear and in proper form. Withdrawal of the objection to claim 1 is respectfully requested.

Claim 3 stands objected to for failing to further limit the subject matter of previous claim 1. Applicant respectfully disagrees. Claim 1 specifically requires converting each block into a block of a *constant data length shorter (S)* than the constant data length (L) if it is determined that the respective bits are added to all of the blocks (*see*, page 10, line 11 through page 11, line 8) while claim 3 requires the erasure of the added bits from the variable-length code of the constant data length (L) based on stored lengths of the bits (*see* page 9,

lines 8-17). Therefore, Applicant respectfully submits that claim 3 further limits the subject matter of previous claim 1 and respectfully requests withdrawal of the outstanding objection.

### **THE CLAIMS DISTINGUISH OVER THE CITED REFERENCES**

In the Office Action, claims 1-3 stand rejected as being unpatentable over the combination of Goris and Mishra and claims 4 and 5 stand rejected as being unpatentable over the combination of Goris and Mishra and Mishra or Silverbrook. In response, Applicant respectfully traverses these rejections, relying on MPEP § 2143, which states that:

[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.<sup>2</sup>

It is respectfully submitted that at least the first and third criteria of MPEP § 2143 have not been met in the Office Action.

### **The Cited References Do Not Suggest All Claim Recitations**

Even if the first requirement of MPEP § 2143 was satisfied in the Office Action (which it is not, as explained below), the cited references still do not meet the third requirement, which is that “the prior art reference (or references when combined) must teach or suggest all the claim limitations.”

Embodiments of the present invention are directed to an image processing apparatus. The image processing apparatus includes an adjusting section, a bit-length storage, a determination section, a variable-length-code storage and a block-data-length conversion section. The variable-length compression section performs variable-length compression on image data of each block included in one page and the adjusting section adjusts each block to a constant data length by adding to or truncating part of a variable-length code of each block

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<sup>2</sup> In view of the United States Patent and Trademark Office guidelines promulgated since the U.S. Supreme Court handed down its ruling in *KSR International Co. v. Teleflex Inc.*, No. 04-1350, on April 30, 2007, these three requirements are still applicable to a rejection in view of 35 U.S.C. §103(a).

obtained by compression by the variable-length compression section. The bit-length storage stores a data length of bits added by the adjusting section to the variable-length code of each block and the determination section determines whether the adjusting section has added respective bits to all blocks included in the one page. The variable-length-code storage stores variable-length codes obtained by erasing the added bits from the variable-length codes of all blocks.

According to one embodiment of the present invention as recited in independent claim 1, *the block-data-length conversion section adds respective bits of different data lengths to variable-length codes of blocks read from the variable-length-code storage, converting data lengths of the blocks into a shorter constant data length than the constant data length, if the determination section determines that the respective bits are added to all blocks, the different data lengths being obtained by subtracting a shortest data length from a data length of each block stored in the bit-length storage.* One exemplary embodiment of the present invention is illustrated in FIG. 5 which shows Blocks B0, B1 and BK with variable-length code (D0, D1 and Dk), fill bits (for Blocks B0 and BK only) and EOB. The data length (L-S) is shorter than the length L (as seen in FIG. 4). Codes can be made to have a constant code length (corresponding to (L-S)) using fill bits of the minimum total data size without truncation of the codes. Support for this claimed feature of independent claim 1 can at least be found on page 7, lines 20-23 and page 10, line 11 through page 11, line 8 of the present specification. With this arrangement, the data length of each block can be adjusted in accordance with an image before making the data length of each block constant, thereby reducing the data amount of each page (page 2, lines 10-14). Applicant respectfully submits that the cited references fail to teach or suggest this claimed feature.

The primary reference of Goris is directed to a method for retrieving compressed textual data from a memory system. The Office Action highlights column 7, lines 44-49 as disclosing this claimed feature. Applicant respectfully disagrees. Goris merely discloses a variable-length compression section which performs variable-length compression on image data of each block included in one page. There is simply no teaching or suggestion of *the different data lengths being obtained by subtracting a shortest data length from a data length of each block stored in the bit-length storage* as required by independent claim 1.

The Mishra and Silverbrook reference also fail to disclose this claimed feature and were not cited for that purpose. Thus, for these reasons alone, independent claim 1 is allowable. Claims dependent from allowable independent claim 1 are allowable by virtue of their direct or indirect dependence from allowable independent claim 1 and for containing other patentable features.

In sum, even if the first requirement of MPEP § 2143 is satisfied, the third requirement of MPEP § 2143 is not satisfied in the Office Action, since the cited references do not teach each and every element of the present invention. Thus, the present claims are allowable.

Lack of Suggestion or Motivation to Modify or Combine the References

The Supreme Court recently addressed the appropriate standard for obviousness in *KSR International Co. v. Teleflex Inc.*, No. 04-1350 (U.S., April 30, 2007). The Court explained that the proper question for evaluating obviousness is “whether there was an apparent reason to combine the known elements in the fashion claimed.” *KSR*, slip op. at 14. Here, the record evidences no such reason.

Goris is devoid of any reason why one of skill in the art would incorporate the teachings of Mishra in Goris. The Office Action at pages 5 and 6 states that it would have been obvious to combine Mishra and Goris because doing so would “maintain high page per minute processing capabilities.” Thus, the proffered motivation, even assuming that the underlying results do in fact occur from general implementation of the teachings of Mishra, does not mean that the ordinary artisan would have incorporated the block processing method of Mishra into the apparatus of Goris. Instead, the Office Action all but relies on Applicant’s disclosure for motivation to modify the primary reference of Goris to arrive at the claimed invention, the Office Action citing nothing in the prior art that provides the specific motivation to modify the references to arrive at the invention as claimed.

In summary, because of the lack of suggestion or motivation in the prior art to modify the reference, the first requirement of MPEP § 2143 has not been met and, hence, a *prima facie* case of obviousness has not been established.

Applicant respectfully submits that independent claim 1 is patentably distinguishable over the cited references and thus, allowable. Moreover, since independent claim 1 is allowable, claims dependent therefrom, namely claims 2-5 are also allowable by virtue of their direct or indirect dependence from allowable independent claim 1 and for containing other patentable features. Further remarks regarding the asserted relationship between any of the claims and the cited references are not necessary in view of their allowability. Applicant's silence as to the Office Action's comments is not indicative of being in acquiescence to the stated grounds of rejection.

### **NEW CLAIMS**

New claims 6-9 have been added to the application. New independent claim 6 is substantially similar in scope to independent claim 1 and recites a similar patentable feature in the context of a method claim. Thus, for the same reasons advanced above with respect to independent claim 1, new independent claim 6 is also allowable. New dependent claims 7-9 are allowable by virtue of their dependence from allowable independent claim 6 and for containing other patentable features.

### **CONCLUSION**

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for

such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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